



What is Milstar?

Milstar is a joint service satellite communications system that provides secure, jam resistant, worldwide communications to meet essential wartime requirements for high priority military users. The multi-satellite constellation links command authorities with a wide variety of resources, including ships, submarines, aircraft and ground stations. The operational Milstar satellite constellation consists of five satellites positioned around the Earth in geosynchronous orbits. Each mid-latitude satellite weighs approximately 10,000 pounds and has a design life of 10 years.

How does it work?

Each Milstar satellite serves as a smart switchboard in space by directing traffic from terminal to terminal anywhere on the Earth. Because the satellite actually processes the communications signal and can link with other Milstar satellites through crosslinks, the requirement for ground controlled switching is significantly reduced. Milstar terminals provide encrypted voice, data, teletype or facsimile communications.

A key goal of Milstar is to provide interoperable communications among the users of Army, Navy and Air Force Milstar terminals. Geographically dispersed mobile and fixed control stations provide survivable

and enduring operational command and control for the Milstar constellation.

The ongoing process

The first Milstar satellite was launched Feb. 7, 1994, aboard a Titan IV expendable launch vehicle. The second was launched Nov. 5, 1995. The third launch on April 30, 1999, placed the satellite in a non-usable orbit. The fourth through sixth satellites have an increased capacity because of an additional medium data rate payload and were launched Feb. 27, 2001, Jan. 15, 2002, and April 8, 2003.

Components of Milstar

The Milstar system is composed of three segments: space (the satellites), terminal (the users) and mission control. Air Force Space Command's Space and Missile Systems Center at Los Angeles AFB, Calif., is responsible for development and acquisition of the Milstar space and mission control segments. The Electronics Systems Center at Hanscom AFB, Mass., is responsible for the Air Force portion of the terminal segment development and acquisition. The 4th Space Operations Squadron at Schriever AFB, Colo., is the front line organization providing satellite platform control and communications payload management.

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